Kekuatan rekat restorasi komposit resin pada permukaan dentin dengan sistem adhesif self-etch dalam berbagai temperatur

Iin Sundari, author

Abstrak

Single-step self-etch adhesive systems are the system that combine self etching primer and bonding agent into one step application. This system was developed as the effort to simplified in application prosedures and give a good bond strength of resin composites to dentin surface. The purpose of this study was to examine the bond strength of resin composites with two singlestep self-etch adhesives system (Xeno III and Clearfil Tri-S Bond) to bovine dentin at temperature of adhesive 3ºC, 22ºC and 30ºC. Adhesive was applied to dentin surface (bovine insisivus mandibular dentin) follow by resin composites bonded according to the manufacturer's instructions. Tensile bond strength of 60 specimens were tested UTM (universal testing machine) after 24 hours storage in aquadest at 37 ºC. The results were analyzed using ANOVA test followed by Tukey's test ($p < 0,05$). The bond strength of Xeno III was significantly diffrent from that of Clearfil tri-S Bond, 0,66±0,271, 2,70±1,528, 0,23±0,104 versus 2,07±0,272, 4,77±0,689, 4,39±1,205 MPa at temperature of materials 3ºC, 22ºC and 30ºC respectively. The bond strength of two single- step adhesives system (Xeno III and Clearfil Tri-S Bond) were highest at temperature 22ºC than other temperatures of materials.